

Air Quality

PERMIT TO CONSTRUCT

Permittee	OrePac Building Products
Permit Number	P-2014.0039
Project ID	61444
Facility ID	001-00302
Facility Location	5500 South Federal Way Boise, Idaho 83716-9617

Permit Authority

This permit (a) is issued according to the “Rules for the Control of Air Pollution in Idaho” (Rules), IDAPA 58.01.01.200–228; (b) pertains only to emissions of air contaminants regulated by the State of Idaho and to the sources specifically allowed to be constructed or modified by this permit; (c) has been granted on the basis of design information presented with the application; (d) does not affect the title of the premises upon which the equipment is to be located; (e) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (f) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; and (g) in no manner implies or suggests that the Idaho Department of Environmental Quality (DEQ) or its officers, agents, or employees assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment. Changes in design, equipment, or operations may be considered a modification subject to DEQ review in accordance with IDAPA 58.01.01.200–228.

Date Issued DRAFT XX, 2015

Thomas Dalzell, Permit Writer

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1. Permit Scope

Purpose

1.1 This is the initial permit to construct (PTC) a door, door-frame, and trim coating facility.

Regulated Sources

1.2 Table 1 lists all sources of regulated emissions in this permit.

Table 1 REGULATED SOURCES

Sources	Control Equipment
<u>Make-Up Air Unit, MAU1:</u> Manufacturer: Weather-Rite Model: MAU TT-230-VTL Manufacture Date: April 2013 Heat input rating: 5.127 MMBtu/hr Fuel: Natural Gas	None Restriction on Fuel Type
<u>Spray Gun:</u> Manufacturer: AirPro Model: 1.4 Type: HVLP Transfer Efficiency: 60%	<u>Paint Booth: PB1</u> Name/Type: Custom Open Face Paint Booth Construction Date: March 1, 2014 Filter, Control Efficiency: 99.43% or greater Limit on the Type and Volume of Material Usage
<u>Spray Gun:</u> Manufacturer: AirPro Model: 3 Type: HVLP Transfer Efficiency: 60%	
Automated Spray Guns HVLP or Higher	<u>Paint Booth: PB2</u> Name/Type: Custom Partially Enclosed Linear Paint Booth Construction Date: March 1, 2014 Filter, Control Efficiency: 99.43% or greater Limit on the Type and Volume of Material Usage
<u>Spray Gun:</u> Manufacturer: Kremlin-Rexson Model: X-Cite Type: HVLPAA Transfer Efficiency: 84%	<u>Paint Booths: PB3 and PB4</u> Manufacturer: Unibilt Name/Type: Conveyer Linear Open Face Paint Booths Construction Date: March 1, 2014 Filter, Control Efficiency: 99.43% or greater Limit on the Type and Volume of Material Usage
<u>Spray Gun:</u> Manufacturer: Anest Iwata Model: LPH-200 Type: HVLP Transfer Efficiency: 60%	
<u>Infrared Curing Oven, IO1:</u> Manufacturer: Unibilt Power: Electricity	None

2. Door and Door-Frame Coating Operation

2.1 Process Description

OrePac Building Products (OrePac) is a door, door-frame, and trim coating facility that has four spray booths. The four paint booths are located in one room where an air make-up unit supplies pressurized air to the room. Filters are used for control of particulate emissions. Drying and paint curing is done just outside of Paint Booth 1 and Paint Booth 2. The products from Paint Booth 3 and Paint Booth 4 are dried and cured as the products pass through an infrared oven on a suspended conveyer. The processes include application of coatings via a HVLP (or equivalent) and HVLPA (or equivalent) paint guns.

2.2 Emissions Control Description

The paint spray booths utilize filters for control of particulate matter emissions from the door and door frame coating operation. In addition, HVLP (or equivalent) and HVLPA (or equivalent) are used to minimize PM₁₀ and VOC emissions from painting. The HVLP (or equivalent) and HVLPA (or equivalent) spray equipment will control PM₁₀ and VOC emissions by having more paint transfer to the desired surfaces than traditional coating equipment.

Table 2 DOOR AND DOOR-FRAME COATING OPERATION DESCRIPTION

Emissions Units / Processes	Emission Control Devices	Emission Points
Paint spray booths	Paint spray booths filter system HVLP and HVLPA spray guns (or equivalent)	Paint booths stack exhaust
Infrared drying oven	None	Infrared drying oven stack exhaust

Emission Limits

2.3 Emission Limits

The PM₁₀ and VOC emissions from the paint booth(s) stack shall not exceed any emissions rate limit in the following table.

Table 3 PAINT BOOTH(S) AND/OR PREPARATION STATION EMISSION LIMITS^a

Source Description	PM ₁₀ ^b		VOC	
	lb/hr ^c	T/yr ^d	lb/hr ^c	T/yr ^d
Paint spray booths	0.03	0.12	21.54	94.36

- In absence of any other credible evidence, compliance is assured by complying with permit operating, monitoring, and record keeping requirements.
- Particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers, including condensable particulate as defined in IDAPA 58.01.01.006.
- Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference method, or DEQ-approved alternative.
- Tons per any consecutive 12-calendar month period.

2.4 Opacity Limit

Emissions from the stacks or functionally equivalent opening associated with the paint booths and infrared drying oven shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

2.5 Odors

The permittee shall not allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids into the atmosphere of such nature and duration and under such conditions as would be injurious to human health or welfare, to animal or plant life, or to property, or to interfere unreasonably with the enjoyment of life or property in accordance with IDAPA 58.01.01.776.

Operating Requirements

2.6 Permitted Fuel

To demonstrate compliance with the Emissions Limits permit condition the heaters and rooftop units shall only combust natural gas as fuel.

2.7 Coatings Material Use Limit

Coating use at the facility shall not exceed the following limits:

- 36 gallons per day or 13,140 gallons per rolling 12 month period of Polane paint or equivalent;
- 20 gallons per day or 7,300 gallons per rolling 12 month period of Kem Aqua paint or equivalent; and
- 4 gallons per day or 1,460 gallons per rolling 12 month period of Stain/Lacquer or equivalent.

For the purposes of this permit condition, “or equivalent” is defined as the HAP, TAP, and VOC content for the new coating, as listed on the MSDS, which is equal to or less than the HAP, TAP, and VOC content, as listed on the MSDS, of the coating as listed in this permit.

2.8 New Coating Material Use Limit

2.8.1 Prior to using coatings or solvent not listed in Section 2.7, the permittee shall generate documentation that shows that the use of the coating or solvent qualifies for an exemption in accordance with IDAPA 58.01.01.220.02, or

2.8.2 Calculate and do not exceed the amount of coating or solvent that may be used per calendar day by using the following equations:

- For TAPs that are volatile:

$$\text{Gallons/day} = [\text{EL} / (\text{TAP\%/100} \times \text{coating or solvent density})] \times 24$$

- For TAPs that are particulate:

$$\text{Gallons/day} = [\text{EL} / (\text{TAP\%/100} \times \text{coating or solvent density})] \times 7,500$$

Where:

Gallons/day = the amount of coating or solvent that may be used per calendar day

EL = TAP allowable pounds per hour emission rate listed in IDAPA 58.01.01.585 or 586

TAP% = the percentage of Toxic Air Pollutant contained in the coating or solvent provided by the manufacturer

Density = the density of the coating or solvent in pounds per gallon

2.9 Spray Gun and Spray Booth Filter System

- All coating at this facility shall be conducted within the booth area, with filter system in place, and exhaust fans operating.
- All painting shall be conducted with HVLP spray guns, a HVLPAA spray gun, or equivalent technology, with a minimum 60% or 84% transfer efficiency as documented by the spray gun manufacturer.
- The permittee shall install, maintain, and operate according to the manufacturer's specifications and recommendations, a spray booth filter system or a preparation station filter system with a minimum control efficiency of 99.43% for PM₁₀ emissions as documented by the filter manufacturer.
- The permittee shall follow the operation and maintenance manual which will include the manufacturers specifications and procedures used to determine when replacement of the filters are required to maintain the 99.43% efficiency.
- The permittee shall keep a record regarding the when the filters are changed, the frequency of changes, and the method used to determine when the change was necessary.

Monitoring and Recordkeeping Requirements

2.10 Odor Complaints

The permittee shall maintain records of all odor complaints received to demonstrate compliance with the Odors Permit Condition. The permittee shall take appropriate corrective action as expeditiously as practicable. The records shall include, at a minimum, the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

2.11 Material Purchase Records and Material Data Safety Sheets

For each material used in the door and door-frame coating process, including but not limited to pre-treatment wash primer, primer, topcoat, clear coat, catalyst, activator, hardener, and thinner/reducer, the permittee shall record and maintain the following records:

- Material purchase records
- Material Safety Data Sheets (MSDS)

2.12 Coating Materials Usage Recordkeeping

When the door, door-frame, and trim coating process is in operation, the permittee shall collect and maintain records of the following information to demonstrate compliance with the Coating Materials Use Limit permit condition:

- On a monthly basis, the quantity and manufacturer of each material used in the door, door-frame, and trim coating process, including but not limited to pre-treatment wash primer, primer, topcoat, clear coat, catalyst, activator, hardener, and thinner/reducer.

3. General Provisions

General Compliance

- 3.1 The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the Rules for the Control of Air Pollution in Idaho. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq.

[Idaho Code §39-101, et seq.]

- 3.2 The permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

[IDAPA 58.01.01.211, 5/1/94]

- 3.3 Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules and regulations.

[IDAPA 58.01.01.212.01, 5/1/94]

Inspection and Entry

- 3.4 Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:

- Enter upon the permittee's premises where an emissions source is located or emissions related activity is conducted, or where records are kept under conditions of this permit;
- Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
- Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
- As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108]

Construction and Operation Notification

- 3.5 This permit shall expire if construction has not begun within two years of its issue date, or if construction is suspended for one year.

- 3.6 The permittee shall furnish DEQ written notifications as follows in accordance with IDAPA 58.01.01.211:

- A notification of the date of initiation of construction, within five working days after occurrence; except in the case where pre-permit construction approval has been granted then notification shall be made within five working days after occurrence or within five working days after permit issuance whichever is later;

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- A notification of the date of any suspension of construction, if such suspension lasts for one year or more;
 - A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date; and
 - A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date.

[IDAPA 58.01.01.211, 5/1/94]

Performance Testing

- 3.7** If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ, at its option, may have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.
- 3.8** All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.
- 3.9** Within 60 days, following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/00]

Monitoring and Recordkeeping

- 3.10** The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Records of monitoring information shall include, but not be limited to the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.211, 5/1/94]

Excess Emissions

- 3.11** The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets and breakdowns.

[IDAPA 58.01.01.130-136, 4/5/00]

Certification

- 3.12** All documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

[IDAPA 58.01.01.123, 5/1/94]

False Statements

- 3.13** No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit, or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.125, 3/23/98]

Tampering

- 3.14** No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

Transferability

- 3.15** This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

[IDAPA 58.01.01.209.06, 4/11/06]

Severability

- 3.16** The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

[IDAPA 58.01.01.211, 5/1/94]